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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/149,424	09/08/1998	JEAN GAUTIER	1948-4541	5010

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EXAMINER

TAMAI, KARL I

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 07/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/149,424

Applicant(s)

GAUTIER, JEAN

Examiner

Tamai IE Karl

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 April 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \*   c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC ' 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 10 are vague and indefinite because it is unclear whether the applicant is attempting to claim an assembly of parts or an alternator. The independent claim 5 defines the invention as a assembly, while depend claims 8-10 define the invention as an alternator. The examiner suggests that all dependent claims having a preamble consistent (the same as) the parent independent claim.

### ***Claim Rejections - 35 USC ' 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1, 2, 4-7, and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Namba et al.(Namba)(US 4,472,649), Matthai(US 4,321,664), and Richards(US 3,812,390). Namba teaches diodes (70a, 70b figure 11) fixed to a cylindrical plinth 68, 76 with a plug portion force fit into an aperture and an abutment

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portion outside the aperture with a larger diameter than the plug portion and the aperture. The abutment portion between the plug portion and the diode. Namba teaches every aspect of the invention except the diode having a housing welded to the plinth. Matthai teaches the diode CH having a housing E1, E2, K, where E1 and E2 are metallic electrodes. Matthai does not teach the diode housing being fixed by welding. Richards teaches the diodes fixed to a metal plate by welding to allow easy replacement. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Namba with the diode housing of Matthai to protect the diode and with the housing fixed to the plinth by welding to allow easy replacement as taught by Richards.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Namba et al.(Namba)(US 4,472,649), Matthai(US 4,321,664), and Richards(US 3,812,390).

Namba teaches both an abutment portion with a cavity(figure 12) and an abutment portion which is larger than the plug portion(figure 11) providing an electrical connection, but does not teach the two together. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Namba, Matthai, and with the diode in a cavity as shown in Namba figure 12 with the outwardly extending abutment arms of figure 11 to provide a convenient place to provide axial and radial friction forces between the plug and the housing to securely hold the plith.

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6. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Namba et al.(Namba)(US 4,472,649), Matthai(US 4,321,664), and Richards(US 3,812,390), in further view of Hagenlocker et al.(Hagenlocker)(US 4,286,186). Namba, Matthai, and Richards teach every aspect of the invention except the plug portion fit into a hole of an alternator support which is on the opposite the stator. Hagenlocher teaches the diodes mounted on a support with a hole on the opposite side of a stator. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Namba, Matthai, and Richards with the support of Hagenlocher to utilize the diodes in an alternator.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Namba et al.(Namba)(US 4,472,649), Matthai(US 4,321,664), Richards(US 3,812,390), and Hagenlocker et al.(Hagenlocker)(US 4,286,186), in further view of Mori et al.(Mori)(US 5,828,564). Namba, Matthai, Richards, and Hagnetlocker teach every aspect of the invention except the hole being a blind hole. Mori teaches the diode mounted on a plinth 310 in a blind hole to allow thermal dissipation from under the diode. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Namba, Matthai, Richards, and Hagenlocher with a blind diode hole to allow thermal dissipation from under the diode.

***Response to Arguments***

8. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new grounds of rejection. The Applicants arguments regarding the 35 USC 112, second paragraph, rejection of claims 8-10 is not persuasive. The rejection is maintained. The Applicant's argument that claims 1, 2, 4-7, and 11-19 are allowable because the diode is not welded to the plinth is not persuasive. Richards teaches that diodes are mounted to a supporting structure by welding to allow for easy replacement(col 3, line 1). The Applicant's argument that Richards does not teach diodes with casing is not persuasive. Richards does not teach the specifics of the diodes composition, because it is more concerned with the rectifier details than the diode, but Richards does teach that the diode(in whatever form it takes) is connected to the support (heat plates) by welding to allow easy removal and replace of the diode. The Applicant's argument that Namba does not teach a diode housing welded to the plinth is not persuasive. Namba does not teach the details of the diode, only the details of the rectifier, such that any generic diodes maybe used. The examiner provide a Mattai to teach the specific structure a diode, that being semiconductor material with two electrodes and a plastic sheath K (col. 3, first paragraph). This diode structure inherently includes the house of the sheath and the two electrodes, which inherently supports and protects the semiconductor material from the external environment. All the elements are shown in the three references and are properly motivated.....

- Namba shows the diode on a plinth, but does not give specifics of the generic diode or how it is connected to the plinth. The examiner provides Mattai to show the

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diode includes a housing, which inherently protects the semiconductor material within. The examiner provides Richards to shown that the diodes are secured to the supporting structure by welding. Therefore a person of ordinary skill in the art would combine the rectifier of Namba with the housing of Mattia to protect the semiconductor material and with the diode housing (as shown in Mattia) secured to the plinth by welding because Richards teaches that diodes fail and need to be replace, and welding allows the diodes to be easily replaced. The rejection is proper and maintained.

### ***Conclusion***

9. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703)308-1371. The facsimile number for the Group is (703)305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Karl I Tamai  
PRIMARY PATENT EXAMINER  
July 3, 2002

 **KARL TAMAI**  
**PRIMARY EXAMINER**